[0035] On the other hand, both a power indicator 10 and an access indicator 11 are also mounted on the hinge portion 3. The power indicator 10 and the access indicator 11 are constituted by LEDs (Light Emitting Diodes), and display ON/OFF states of a power supply. These indicators 10 and 11 can be visually confirmed from an external area under two-page spread condition, and also, under such a condition that the main displays 1 and 2 are closed in such a manner that the main displays 1 and 2 are overlapped with each other and are folded into two displays so as to be stored.

[0036] For instance, with respect to the portable information processing apparatus according to an embodiment mode of the present invention, the frames 5 and 6 are designed in a paperback size of 151 mm×105 mm×6 mm when this portable information processing apparatus is stored, and also, designed in a size of 151 mm×204 mm×3 mm when this portable information processing apparatus is used. In order that the portable information processing apparatus is held by one hand of a user and is operated by the user while the portable information processing apparatus is used, a thickness thereof is selected to be 3 mm in an optimum condition, and a weight thereof is made lighter than 200 g in a favorable condition.

[0037] It should be noted that in accordance with the above-described embodiment mode, the electronic books are displayed on the main displays 1 and 2 respectively under the two-page spread condition. Alternatively, an electronic dictionary may be displayed on one of these main displays 1 and 2 by way of a predetermined switching operation, or a software input by using a display keyboard image. Also, in such a case that the electronic book is displayed, it is so assumed that a marking function using the switch and the like and the outside display 9 is added which may be replaced by a tag and a bookmark, and thus, a care is taken so as to provide conveniences to the user.

[0038] FIG. 3 is another display exemplification. That is, a Web screen is displayed on the main display 1 in the normal resolution, and an electronic book is displayed on the main display 2 in such a printing type quality resolution which is different from that of this Web screen.

[0039] In this display exemplification, it is so assumed that the Web screen is displayed in color and in the resolution of 200 ppi (pixel per inch: total pixel number per 1 inch), whereas the electronic book is displayed in the resolution of 600 ppi. In order to display different contents in the different resolution on the main displays 1 and 2 respectively, if both display controllers and display memories are separately employed, then display control operations may be carried out in an easy manner. In this display exemplification, it is so assumed that while a commonly-operable display controller is employed in view of a power saving purpose, a commonly-operable display memory is sectioned so as to be controlled. Also, it is so assumed that an allocation of display data to display surfaces is automatically carried out in response to resolution, while this allocation of the display data is performed in such a manner that the Web screen containing a color image is displayed on the main display 1 and the electronic book corresponding to character information is displayed on the main display 2. It should be understood that in order to furthermore emphasize the power saving operation, the display memory may be alternatively allocated to a main memory, and the function of the display controller may be executed by a CPU. It is so assumed that a detailed explanation as to an internal structure and the like of the portable information processing apparatus will be made later.

[0040] Alternatively, a solar cell 12 may be mounted on a portion of the frame 5 on which the display device of the main display 1 where the Web screen is displayed is mounted. In this alternative case, while the solar cell 12 is used as an auxiliary power source, either a lithium ion battery or a polymer battery is used as a main power source.

[0041] In the above-described embodiment mode, such an exemplification that the Web screen is displayed on one screen has been shown. Alternatively, two screens (namely, right/left screens) may be allocated as the Web screen. The following exemplifications may be conceived. That is, an exclusively-used site may be displayed on one display screen and a content may be displayed on the other display screen, i.e., a right/left asymmetrical type display. Also, a content which is wanted to viewed may be alternately displayed on the right display screen and the left display screen, i.e., a right/left symmetrical type display. In particular, as to the right/left symmetrical type, such a display variation may be realized in such a manner that while a display screen is subdivided into a right display screen and a left display screen, a continuation of a content which has been displayed on the left screen is displayed on the right display screen. Also, another idea may be alternatively conceived in which two display screens are arranged at upper/lower positions and a display content is scrolled over the upper/lower display screens. It is so assumed that the scrolling operation of the display screens is performed in an inter connection manner-between the two display screens in any of the above-described exemplifications. Also, in the above-described embodiment mode, such an arrangement that there are two main displays has been explained. Alternatively, such an arrangement that 3, or more sets of main displays are provided may be employed. For instance, while two sets of coupling portions constructed of hinge mechanisms are provided so as to couple three sets of main displays to each other, these three main displays may be folded into three displays so as to be stored.

[0042] FIG. 4 shows a further display exemplification. In this display exemplification, a content which has been transmitted via a communication unit (not shown) from a network is displayed on the main displays 1 and 2, in this exemplification, an electronic newspaper is displayed thereon. Indexes are displayed on the main display 1 in the resolution of 200 ppi, and then, since an index is selected and this selected index is clicked by using, for instance, an input pen (will be explained later), a text of the electronic newspaper can be obtained. This text is displayed on the main display 2 in a black/white mode and in the resolution of 600 ppi.

Display Principle of Display Device

[0043] In this case, the display device used in the portable information processing apparatus according to the embodiment mode of the present invention will now be briefly explained. In this case, a sheet display is used as the display device, while the sheet display employs such an electrophoretic technique that charged particles are moved in dispersion media by an electric field.